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09/632,196	08/02/2000	Gerhard A. Schneider	4396	9110

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EXAMINER	
DINH, DUC Q	
ART UNIT	PAPER NUMBER
2674	13

DATE MAILED: 07/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

OCT 91

Office Action Summary	Application No.	Applicant(s)	
	09/632,196	SCHNEIDER, GERHARD A.	
	Examiner	Art Unit	
	DUC Q DINH	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 May 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18 and 20-55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18 and 20-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *17* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 5th, 2003 has been entered.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on May 5th, 2003 has been received and entered. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention

4. Claims 31- 37, and 54 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. For example, claims 31 –37, recited the limitations "a second presentation element coupled to the radio frequency communication unit and configured to provide a second control signal to the host system". Although the specification does mention the radio frequency communication unit and the first

presentation element (page 12, line 20- page 13, line 5), there is no disclosure for the second presentation element coupled to the radio frequency communication unit and configured to provide a second control signal to the host system.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 20, 26-28, 38-46, 48-53 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Daniels (U. P. Patent No. 6,417,840 B1) in view of Stork et al. (U. S. Patent No. 6,275,174), hereinafter Stork 174'.

In reference to claim 1 Daniels discloses an integrated cordless mouse in Fig. 11 comprising a signal generator (corresponding to the electronic control device) and laser generator (coherent light source) which selectively communicates with a computer and which is also capable of transmitting a beam of laser light. As shown in Fig. 1-5 there is illustrated a wireless mouse 10 capable of transmitting, for example, infrared control signals to a computer and of transmitting a focused beam of light for presentation highlighting. The mouse 10 has conventional operating buttons 14 and 16 on an upper surface 12. The mouse 10 further has a mouse ball 26 in an undersurface 18, a front surface 20, and a plurality of sides 22. The left and right operating buttons 14, 16 are separately operable, and each button 14, 16 sends a specific infrared (IR) wireless signal or signals to a computer or other like device through a port 24

located on the front surface 20 (col. 2, lines 30-42). In addition Daniels discloses that the mouse 10 provides the added functionality of enabling a user to point to the computer images with a beam of light. Specifically, an operator may operate the mouse 10 for computer control while standing at a podium, dais, or other location. By aligning the port 24 with a light receiver on the computer, an operator may move the mouse 10 on a surface and/or press one of the operating buttons 14, 16 in order to, for example, switch to the next displayed image. Further, the operator may depress the switch 30 and point the port 24 towards a certain aspect of the computer image being displayed, thereby highlighting that aspect with a beam of light (col. 4, line 64-col. 5, line 3). Accordingly, Daniels discloses everything except the limitation that the device is configured for simultaneously operating the laser pointer and the input device. Stork 174' discloses an input device in Fig. 1, when pressing the knob H an input control signal is sent and the laser pointer is on at the same time (Fig. 1, col. 7, lines 11-21)

It would have been obvious for one of ordinary skill in the art at the time of the invention was made to provide the teaching of Stork 174', i.e.: using the input device and the laser pointer at the same time in the device of Daniels for providing additional enhanced cursor control for the system.

In reference to claim 20, Daniels discloses that the signals transmitted by a cordless mouse 10 to the computer are of necessity signals, which may be sent without a physical transmission line. Preferably, the mouse 10 sends infrared signals generated by the signal generator 41 in response to movements sensed by the mouse ball 26 and in response to operation of switches controlled by the operating buttons 14, 16. Alternatively, provided a suitable

frequency band is used which does not disrupt operation of the computer, the signals from the signal generator 41 may be transmitted as radio frequency signals (col. 3, line 35-45).

In reference to claim 26-28, Daniels discloses in FIGS. 3, 4, a switch 30 is provided on a side 22 of he cordless mouse 10. While the switch 30 is shown to be on the side 22 to the left of the front surface 20, it is to be understood that the switch may be located anywhere on the mouse 10. The switch 30 functions to selectively allow transmission of the computer control signals produced by either of the buttons 14, 16 and/or the mouse ball 26 or transmission of the beam of light from the light generating apparatus 27 through the port 24. Specifically, with the switch 30 in its normal, under pressed state, the mouse 10 functions as a conventional cordless computer mouse and the signal generator 41 is enabled to transmit signals from the mouse ball 26 and the operating buttons 14, 16 to the computer. Upon depression of the switch 30, the signal generator 41 is disabled. Instead, the laser generator 42 is enabled and a beam of light from the laser generator 42, is transmitted through the port 24. FIG. 11 shows the electrical connection of the switch 30 to enable (EN) inputs of the signal generator 41 and the laser generator 42. As shown, the switch 30 selectively applies an enable signal to one or the other generators 41, 42 in accordance with whether it is depressed or not. Alternatively, as illustrated in FIGS. 10A and 10B, a switch 30' may be a toggle switch. Namely, the switch 30' may be pushed and then mechanically held into an A position, which enables the signal generator 41 or into a B position which enables the laser generator 42 (col. 3, line 67 - col. 4 line 19).

In reference to claims 38-39, refer to the rejection as applied to claim 1. In addition, Daniels discloses that the signals transmitted by a cordless mouse 10 to the computer are of necessity signals, which may be sent without a physical transmission line. Preferably, the mouse 10 sends infrared signals generated by the signal generator 41 in response to movements sensed by the mouse ball 26 and in response to operation of switches controlled by the operating buttons 14, 16. Alternatively, provided a suitable frequency band is used which does not disrupt operation of the computer, the signals from the signal generator 41 may be transmitted as radio frequency signals (col. 3, line 35-45).

In reference to claims 40-42 and 55 Daniels discloses that the communication device of the invention may also be constructed as a trackball apparatus 100, as illustrated in FIGS. 6-7. The trackball apparatus 100 includes a trackball 102 protruding through an upper surface 104 of a housing. Further, trackball apparatus 100 includes a plurality of sides 106 and a front surface 108. A port 110 is located in the surface 108. A switch 112 is positioned on one of the sides 106. As with the switches 30, 30' on the mouse 10, the switch 112 may be placed anywhere on the trackball apparatus 100. The switch 112 functions similarly to switch 30. The trackball apparatus 100 includes operating switches 114, 116 similar in function to the operating buttons 14, 16 previously described. (13) Shown in FIGS. 8, 9 is a touch pad apparatus 200 including a touch pad 202 provided on an upper surface 204. Further, the touch pad apparatus 200 includes a plurality of sides 206 and front surface 208 in which is located a port 210. A switch 212 is provided anywhere on the touch pad apparatus 200 and functions similarly to the previously

described switches 30, 30', 112. The touch pad apparatus 200 includes operating switches 214, 216 similar in function to the operating buttons 14, 16 previously described (col.4, lines 26-48).

In reference to claim 43, Daniels discloses the laser generator in Fig. 12 as the second presentation control element.

In reference to claims 44-46, Daniels discloses switch 30 to select between the mouse mode (for slide show control) and laser pointer mode (optical pointing device mode) [col.4, line 63-col.5, line 3].

In reference to claim 48, Daniels discloses that the cordless device is used for sending control signals to a computer as claimed (col. 1, lines 30-37).

Claims 49-53 are method claims associated with the above apparatus of claims 1, 20, 26-27, and are rejected as the same set forth as applied to the above claims.

7. Claims 2-5, 7 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniels and Stork 174'.

In reference to claims 2-5, 7, 9-10, Daniels Stork 174' discloses everything except for the location and/or arrangement of the control mechanism a light beam on the device housing.

Absent a showing of critically and/or unexpected result, it would been obvious to one of ordinary skill in the art to relocate the arrangement of the control mechanism an light beam on the device housing as desired as was judicially recognized with IN RE JAPIKEE USPQ 70

(CCPA 1950), which recognizes that the relocation of well known element is normally not desired toward patentable subject matter.

8. Claims 6 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniels and Stork 174' and further in view of Liu (U. P. Patent No. 6,133,907).

In reference to claims 6 and 47, Daniels and Stork 174' discloses everything except a lens of the coherent light source. Liu discloses a pointing device employing laser beam having a lens 16 in Fig. 2 as claimed.

It would have been obvious for one of ordinary skill in the art to provide the lens taught by Liu in the device of Daniels and Stork 174' for protecting the laser light source.

9. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniels and Stork 174'in view of Kim (U. S. Patent No. 6,545,664)

In reference to claims 16-17, Daniels and Stork 174' discloses everything except the first presentation and second presentation is configured as module and coupled together to form a unitary unit. Kim discloses a head computer pointer in Figs. 4-5 having separate modules as claimed.

It would have been obvious for one of ordinary skill in the art at the time of the invention was made to applied a method of configuring module of different elements in the device of Kim in the device of Daniels and Stork 174' as user's desire so that the modules can be selectively removed or added depending on the desired function set of the user.

Ask for m.legaspi

In addition, absent a showing of critically and/or unexpected result, it would been obvious to one of ordinary skill in the art to separate the light source and the input device as separate modules as desired as was judicially recognized with NERWIN V. ERLICHMAN 168 USPQ 177, 179 (PTO Bd. Of Int. 1969), which recognizes that the relocation of well known element is normally not desired toward patentable subject matter.

10. Claims 8, 11-15, 18-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniels and Stork 174' in view of Stork et al (U. P. Patent No. 6,181,329 B1), hereinafter Stork 329'.

In reference to claims 8, 11-13, 18-19, Daniel and Stork 174' fail to discloses a writing mechanism and gyroscope system for the electrical control device. Stork 329' discloses an apparatus for tracking the location of a writing instrument comprises and three gyroscopes 126-128.

It would have been obvious for one of ordinary skill in the art for providing the Stork's 329' writing instrument to the device discloses by Daniels and Stork 174'for providing a convenient writing means for users using the input device.

It would have been also obvious for one of ordinary skill in the art at to provide the gyroscope system taught by Stork 329' in the device of Daniel and Stork 174' for sensing the position information of the device for the system.

In reference to claims 14-15, Daniels and Stork 174' discloses everything except for the location and/or arrangement of the control mechanism, the writing instrument and light beam source on the device housing.

Absent a showing of critically and/or unexpected result, it would been obvious to one of ordinary skill in the art to relocate the arrangement of the control mechanism an light beam on the device housing as desired as was judicially recognized with IN RE JAPIKEE USPQ 70 (CCPA 1950), which recognizes that the relocation of well known element is normally not desired toward patentable subject matter.

In reference to claim 21, Daniel and Stork 174' fails to disclose radio-frequency receiver for the system. Stork 392' discloses a transceiver 140 for transmitting data from tracking sensor and other data to the remote computing device 175. Transceiver 140 may also receive data from remote computing device 175 (See Fig. 1).

It would have been obvious for one of ordinary skill in the art at the time of the invention was made to substitute the transceiver taught by Stork 329' with the transmitter disclosed by Daniels for providing two way communication for the system, i.e.:, transmitting data from the input device to the remote computer and for receiving data from remote computing system (col. 3, lines 30-37).

11. Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniels and Stork 174' in view of Hu (U. P. Patent No. 5,952,997).

In reference to claim 22, Daniels and Stork 174' discloses everything except the electronic control comprises an optical pointing device. Hu discloses an optical mouse as claimed.

It would have been obvious for one of ordinary skill in the art to substitute the optical mouse taught by Hu for the conventional mouse of Daniels and Stork 174' to provide other optional input device as user's desire.

In reference to claims 23-25, Daniels discloses switch 30 to select between the mouse mode (for slide show control) and laser pointer mode (optical pointing device mode) [col.4, line 63-col.5, line 3].

12. Claims 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniels, Stork 174' and further in view of Buchner et al. (U. S. Patent No. 5,532,753), hereinafter Buchner.

In reference to claims 29-30, Daniels and Stork 174' fail to disclose the power management unit to turn off at least one electronic device and the coherent light source in response to a predetermined time. Buchner disclose an input device 3 in Fig. 1 having operation member 3a, If the operation member 3a is released, the control picture disappears and the remote controller 3 is automatically switched from the operation mode to the power off or power save mode in a predetermined time after the operation member 3a is released (col. 5, lines 63-67).

It would have been obvious for one of ordinary skill in the art at the time of the invention was made to provide the teaching of Buchner in the device of Daniels and Stork 174' , i.e.: turn of the power of the input device after the operation member is released in a predetermined of time, for saving power of the input device.

Response to Arguments

13. Applicant's arguments, see page 12-22 of the Amendment, filed May 5th, 2003 have been fully considered but they are not persuasive. With respect to the rejection(s)of claim(s) 1-15, 20-30 and 38-53 see the 103 rejection based on Daniels and Stork 174' above. With respect to the argument cited that the universal presentation device ... comprising a radio frequency receiver (page 15, lines 11-14 of the amendment), see the rejection of claim 21 above. With respect to the 103(a) rejection for claims 2-19, 22-25, and 29 see the 112 First paragraph applied for claims 1-15, 20-30, 38-42 and 49-53. Claims 31-37 and 54 are not treated under art rejection because to the specification does not support for the second presentations element (see the appropriate 112 rejection above). With respect to claims 16-17, new discovered art of Kim discloses a pointing device configured as module to be combined as claimed. With respect to claims 29-30 (page 22 of the amendment). Newly discovered art of Buchner teaches a method of turn off the control device as claimed (see the rejection applied for claims 29-30 above). The rejection, therefore, has been maintained for the reason elaborated in this office action.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **DUC Q DINH** whose telephone number is **(703) 306-5412** The examiner can normally be reached on Mon-Fri from 8:00.AM-4:00.PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached on **(703) 305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivery response should be brought to: Crystal Park II, 2121 Crystal Drive, Arlington, Va Sixth Floor (Receptionist)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

DUC Q DINH
Examiner
Art Unit 2674

DQD
July 11, 2003

RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600